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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/800,111	03/12/2004	Mark R. Ayres	495812005700	8922
25226	7590	03/24/2006		
MORRISON & FOERSTER LLP 755 PAGE MILL RD PALO ALTO, CA 94304-1018				
			EXAMINER LU, TONY W	
			ART UNIT 2878	PAPER NUMBER

DATE MAILED: 03/24/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.		Applicant(s)	
	10/800,111		AYRES, MARK R.	
	Examiner		Art Unit	
	Tony Lu		2878	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-32 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-32 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 12 March 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. ____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date <u>5/25/2005</u> | 6) <input type="checkbox"/> Other: ____ |

DETAILED ACTION

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

With respect to claim 3, on lines 1-2, the phrase "the reference location is associated with an expected position of a volume of the optical article" is unclear in its meaning. It is unclear what exactly is the relative relationship or association between "a location" and "a volume". Further what and where is the "volume of the optical article" referring to?

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-4,6,7,14-20, 24-26 and 29, as understood by the examiner, are rejected under 35 U.S.C. 102(b) as being anticipated by Migeotte US3688235.

With respect to claim 1, Migeotte discloses a system and a method for measuring a characteristic of an optical article(12), comprising: a light source(1) for producing light; an optical element(6) for focusing the light along a probe path(9) to a reference location(location of the optical article) associated with an expected position of the optical article; a sensor(24,28) for detecting the light interacted with the optical article, wherein the sensor generates signals associated with an intensity(detected by 28) and

position(detected by 24) of the light received; and a processor(34), wherein the processor is configured to received the signals from the sensor and determine a deflection angle of the light from the probe path(read col.4, lines 13-36).

With respect to claim 2, per the above discussion, Migeotte discloses the reference location is associated with an expected position of a surface of the optical article(see fig.1).

With respect to claim 3, per the above discussion, Migeotte discloses the reference location is associated with an expected portion and/or volume of the optical article(see fig.1).

With respect to claim 4, per the above discussion, Migeotte discloses moving and holding means(55, read col.5, lines 38-40) for translating an optical article relative to the light source and the probe path in at least one dimension.

With respect to claim 6, per the above discussion, Migeotte discloses the processor is configured to determined a characteristic of the optical article based on the deflection angle of the light at multiple locations(a small portion of the optical article, read col.8, lines 17-32) of the optical article.

With respect to claim 7, per the above discussion, Migeotte discloses the characteristics includes flatness or the bending angle or the deflection angle of the optical article(see col.2 lines 44-65).

With respect to claim 14, per the above discussion, Migeotte discloses a second optical element(15) positioned to focus the light beam from the reference location to a pinhole filter(20,26) between the second optical element and the sensor.

With respect to claim 15, per the above discussion, Migeotte discloses the second optical element and pinhole filter are disposed in a confocal imaging configuration.

With respect to claim 16, per the above discussion, Migeotte discloses the sensor is positioned to detect light passing through the reference location(see fig.1).

With respect to claim 17, per the above discussion, Migeotte discloses the sensor(28) is positioned to detect the light reflected from the reflection location.

With respect to claim 18, Migeotte discloses a method for measuring a characteristic of an optical article(12), comprising: illuminating an optical article with a focused beam of light along a probe path; detecting the light with a sensor after the light interacts with the optical article; determining a deflection angle of the beam of light with respect to the probe path after interacting with the optical article; and determining a characteristic of the optical based on the deflection angle(read col.4, lines 13-36).

With respect to claim 19, per the above discussion, Migeotte discloses scanning multiple positions of the optical article with focused beam of light to determine deflection angles at multiple positions of the optical article(read col.5, lines 37-59).

With respect to claim 20, per the above discussion, Migeotte discloses using multiple deflection angles to determine a characteristic of the optical articles(angularity at different portions of sheet 12).

With respect to claim 24, per the above discussion, Migeotte discloses confocally imaging the light after the light interacts with the optical article(see fig.1).

With respect to claim 25, per the above discussion, Migeotte discloses the light is confocally filtered after the light interacts with the optical article(see fig.1, filters 20,26)

With respect to claim 26, Migeotte discloses a method for measuring a characteristic of an optical article(12), comprising: scanning an optical article with a focused beam of light; detecting a deflection angle of the focused beam of light from the optical article at multiple scan position(read col.5, lines 37-59); and determining a characteristic of the optical article based on the deflection angles at the multiple scan positions(detection angularity of the optical article at different portions).

With respect to claim 29, per the above discussion, Migeotte discloses the focused beam of light from the optical article passes through a confocal imaging system(17,20,26).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 5, 8,9,27 and 28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Migeotte US3688235.

With respect to claims 5,27 and 28, per the above discussion, although Migeotte disclose suitable moving and holding means(55) but Migeotte lacks a clear teaching of whether or not the means is for translating the optical article relative to the light source and the probe path in three dimensions.

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Migeotte by making the moving and holding means move the optical article in three dimensions for desired adjustable placements of the optical article in order to provide a flexible system in examining various portions and/or zones of the optical articles. Further citations in claims 27 and 28, regarding the scanning direction in three dimension direction and/or any other direction, it would have been obvious for similar reasons set forth in the discussion above.

With respect to claims 8 and 9, per the above discussion, Migeotte disclose the detection of a transmission properties of the article/element but lacks a clear teaching of the properties include an index of refraction value. It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Migeotte by including index of refraction of the optical article and/or transparent objects in order to enable the system to acquire more optical information and/or the optical properties of the optical article. Further citations in claim 9, regarding stored information would have been obvious for similar reasons set forth in the discussion above.

Claims 21-23 and 30-32 are rejected under 35 U.S.C. 103(a) as being unpatentable over Migeotte US3688235 in view of Klein et al US6134011.

With respect to claims 21-23 and 30-32, per the above discussion, Migeotte lacks a clear teaching of producing a surface relief pattern and/or a volumetric index map and/or an equivalent single surface plot from the multiple deflection angles.

Klein et al disclose evaluating the topography and thickness or optical characteristic(col.3, lines 65-67, col.4, lines 1-6) of an optical article(5). Klein et al also disclose the reflectance measurements are made to compile a second map, or a comparative reflectance map of the optical article(read col.6, lines 60-65).

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Migeotte by deriving any maps and/or patterns and/or plot for the measurement results of the deflection angles information from each zones and/or portions of the optical articles, as taught by Klein et al, in order to provide a thorough analysis of the characteristics of the optical article for examination, if so desired.

Claims 10-13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Migeotte US3688235 in view of Fanton et al US5181080.

With respect to claims 10-13, per the above discussion, Migeotte fails to teach the sensor is a quadrant photodetector.

Fanton et al disclose a method and/or system utilizing a quadrant detector(a position sensitive detector having at least two segments, see fig.2) and the basic operation of the quadrant detector(read col.2, lines 45-64) such that the power of a beam is measured by a photodetector along two orthogonal axes. Also Fanton et al disclose each quadrant of the quadrant detector will generate an output signal proportional to the magnitude of the power of the beam striking the quadrant(read col.4, lines 35-50).

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Migeotte by utilizing a quadrant photodetector taught by Fanton et al in order to promote accuracy of the deflection/reflection/angularity measurement results from the system as well as providing a detailing of the basic operation of a quadrant detector.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

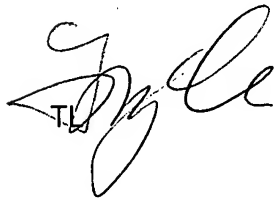
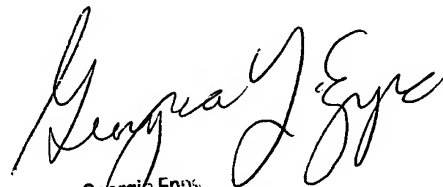
1) Bretschneider US5210592 disclose a method and an apparatus for determining the optical quality of a transparent plate having a position sensitive detector.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tony Lu whose telephone number is 5712728448. The examiner can normally be reached on M-F 9:00am- 6:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Georgia Epps can be reached on 5712722328. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2878

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

A handwritten signature in black ink, appearing to be "J. Epps", with a small "TL" written below the first part of the signature.A handwritten signature in black ink, appearing to be "Georgia Epps".

Georgia Epps
Supervisory Patent Examiner
Technology Center 2800